

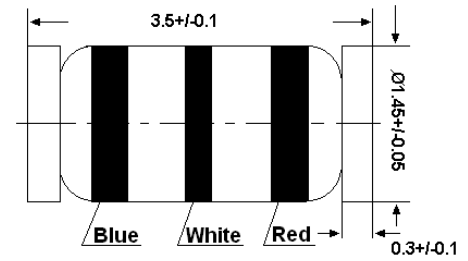
RLZ Series

SILICON EPITAXIAL PLANAR ZENER DIODES Constant Voltage Control Applications

LL-34

Features

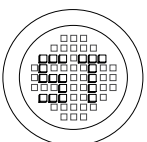
- Small surface mounting type. (LLDS)
- High reliability.



Glass case MiniMELF
Dimensions in mm

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

	Symbol	Value	Unit
Power Dissipation	P_D	500	mW
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_s	-65 to 175	$^\circ\text{C}$



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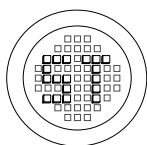
РАДИОТЕХ

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RLZ Series

Characteristics at $T_a = 25^\circ\text{C}$

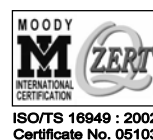
Type	Zener Voltage			Operating resistance		Rising operating resistance		Reverse Current	
	V_Z (V)			Z_Z (Ω)		Z_{ZK} (Ω)		I_R (μA)	
	Min.	Max.	I_Z (mA)	Max.	I_Z (mA)	Max.	I_Z (mA)	Max.	V_R (V)
RLZ 3.6	3.4	3.8	20	60	20	1000	1	10	1
RLZ 3.6 A	3.455	3.695	20	60	20	1000	1	10	1
RLZ 3.6 B	3.6	3.845	20	60	20	1000	1	10	1
RLZ 3.9	3.7	4.1	20	50	20	1000	1	5	1
RLZ 3.9 A	3.74	4.01	20	50	20	1000	1	5	1
RLZ 3.9 B	3.89	4.16	20	50	20	1000	1	5	1
RLZ 4.3	4.0	4.5	20	40	20	1000	1	5	1
RLZ 4.3 A	4.04	4.29	20	40	20	1000	1	5	1
RLZ 4.3 B	4.17	4.43	20	40	20	1000	1	5	1
RLZ 4.3 C	4.30	4.57	20	40	20	1000	1	5	1
RLZ 4.7	4.4	4.9	20	25	20	900	1	5	1
RLZ 4.7 A	4.44	4.68	20	25	20	900	1	5	1
RLZ 4.7 B	4.55	4.8	20	25	20	900	1	5	1
RLZ 4.7 C	4.68	4.93	20	25	20	900	1	5	1
RLZ 5.1	4.8	5.4	20	20	20	800	1	5	1.5
RLZ 5.1 A	4.81	5.07	20	20	20	800	1	5	1.5
RLZ 5.1 B	4.94	5.2	20	20	20	800	1	5	1.5
RLZ 5.1 C	5.09	5.37	20	20	20	800	1	5	1.5
RLZ 5.6	5.3	6	20	13	20	500	1	5	2.5
RLZ 5.6 A	5.28	5.55	20	13	20	500	1	5	2.5
RLZ 5.6 B	5.45	5.73	20	13	20	500	1	5	2.5
RLZ 5.6 C	5.61	5.91	20	13	20	500	1	5	2.5
RLZ 6.2	5.8	6.6	20	10	20	300	1	5	3
RLZ 6.2 A	5.78	6.09	20	10	20	300	1	5	3
RLZ 6.2 B	5.96	6.27	20	10	20	300	1	5	3
RLZ 6.2 C	6.12	6.44	20	10	20	300	1	5	3
RLZ 6.8	6.4	7.2	20	8	20	150	0.5	2	3.5
RLZ 6.8 A	6.29	6.63	20	8	20	150	0.5	2	3.5
RLZ 6.8 B	6.49	6.83	20	8	20	150	0.5	2	3.5
RLZ 6.8 C	6.66	7.01	20	8	20	150	0.5	2	3.5



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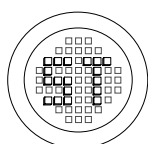


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RLZ Series

Characteristics at $T_a = 25^\circ\text{C}$

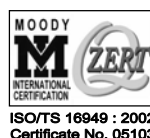
Type	Zener Voltage			Operating resistance		Rising operating resistance		Reverse Current	
	V_Z (V)			Z_Z (Ω)		Z_{ZK} (Ω)		I_R (μA)	
	Min.	Max.	I_Z (mA)	Max.	I_Z (mA)	Max.	I_Z (mA)	Max.	V_R (V)
RLZ 7.5	7	7.9	20	8	20	120	0.5	0.5	4
RLZ 7.5 A	6.85	7.22	20	8	20	120	0.5	0.5	4
RLZ 7.5 B	7.07	7.45	20	8	20	120	0.5	0.5	4
RLZ 7.5 C	7.29	7.67	20	8	20	120	0.5	0.5	4
RLZ 8.2	7.7	8.7	20	8	20	120	0.5	0.5	5
RLZ 8.2 A	7.53	7.92	20	8	20	120	0.5	0.5	5
RLZ 8.2 B	7.78	8.19	20	8	20	120	0.5	0.5	5
RLZ 8.2 C	8.03	8.45	20	8	20	120	0.5	0.5	5
RLZ 9.1	8.5	9.6	20	8	20	120	0.5	0.5	6
RLZ 9.1 A	8.29	8.73	20	8	20	120	0.5	0.5	6
RLZ 9.1 B	8.57	9.01	20	8	20	120	0.5	0.5	6
RLZ 9.1 C	8.83	9.3	20	8	20	120	0.5	0.5	6
RLZ 10	9.4	10.6	20	8	20	120	0.5	0.2	7
RLZ 10 A	9.12	9.59	20	8	20	120	0.5	0.2	7
RLZ 10 B	9.41	9.9	20	8	20	120	0.5	0.2	7
RLZ 10 C	9.7	10.2	20	8	20	120	0.5	0.2	7
RLZ 10 D	9.94	10.44	20	8	20	120	0.5	0.2	7
RLZ 11	10.4	11.6	10	10	10	120	0.5	0.2	8
RLZ 11 A	10.18	10.71	10	10	10	120	0.5	0.2	8
RLZ 11 B	10.50	11.05	10	10	10	120	0.5	0.2	8
RLZ 11 C	10.82	11.38	10	10	10	120	0.5	0.2	8
RLZ 12	11.4	12.6	10	12	10	110	0.5	0.2	9
RLZ 12 A	11.13	11.71	10	12	10	110	0.5	0.2	9
RLZ 12 B	11.44	12.03	10	12	10	110	0.5	0.2	9
RLZ 12 C	11.74	12.35	10	12	10	110	0.5	0.2	9
RLZ 13	12.4	14.1	10	14	10	110	0.5	0.2	10
RLZ 13 A	12.11	12.75	10	14	10	110	0.5	0.2	10
RLZ 13 B	12.55	13.21	10	14	10	110	0.5	0.2	10
RLZ 13 C	12.99	13.66	10	14	10	110	0.5	0.2	10



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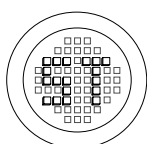


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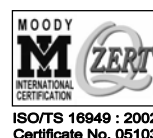
RLZ Series

Characteristics at $T_a = 25^\circ\text{C}$

Type	Zener Voltage			Operating resistance		Rising operating resistance		Reverse Current	
	V_Z (V)			Z_Z (Ω)		Z_{ZK} (Ω)		I_R (μA)	
	Min.	Max.	I_Z (mA)	Max.	I_Z (mA)	Max.	I_Z (mA)	Max.	V_R (V)
RLZ 15	13.8	15.6	10	16	10	110	0.5	0.2	11
RLZ 15 A	13.44	14.13	10	16	10	110	0.5	0.2	11
RLZ 15 B	13.89	14.62	10	16	10	110	0.5	0.2	11
RLZ 15 C	14.35	15.09	10	16	10	110	0.5	0.2	11
RLZ 16	15.3	17.1	10	18	10	150	0.5	0.2	12
RLZ 16 A	14.8	15.57	10	18	10	150	0.5	0.2	12
RLZ 16 B	15.25	16.04	10	18	10	150	0.5	0.2	12
RLZ 16 C	15.69	16.51	10	18	10	150	0.5	0.2	12
RLZ 18	16.8	19.1	10	23	10	150	0.5	0.2	13
RLZ 18 A	16.22	17.06	10	23	10	150	0.5	0.2	13
RLZ 18 B	16.82	17.7	10	23	10	150	0.5	0.2	13
RLZ 18 C	17.42	18.33	10	23	10	150	0.5	0.2	13
RLZ 20	18.8	21.2	10	28	10	200	0.5	0.2	15
RLZ 20 A	18.02	18.96	10	28	10	200	0.5	0.2	15
RLZ 20 B	18.63	19.59	10	28	10	200	0.5	0.2	15
RLZ 20 C	19.23	20.22	10	28	10	200	0.5	0.2	15
RLZ 20 D	19.72	20.72	10	28	10	200	0.5	0.2	15
RLZ 22	20.8	23.3	5	30	5	200	0.5	0.2	17
RLZ 22 A	20.15	21.2	5	30	5	200	0.5	0.2	17
RLZ 22 B	20.64	21.71	5	30	5	200	0.5	0.2	17
RLZ 22 C	21.08	22.17	5	30	5	200	0.5	0.2	17
RLZ 22 D	21.52	22.63	5	30	5	200	0.5	0.2	17
RLZ 24	22.8	25.6	5	35	5	200	0.5	0.2	19
RLZ 24 A	22.05	23.18	5	35	5	200	0.5	0.2	19
RLZ 24 B	22.61	23.77	5	35	5	200	0.5	0.2	19
RLZ 24 C	23.12	24.31	5	35	5	200	0.5	0.2	19
RLZ 24 D	23.63	24.85	5	35	5	200	0.5	0.2	19
RLZ 27	25.1	28.9	5	45	5	250	0.5	0.2	21
RLZ 27 A	24.26	25.52	5	45	5	250	0.5	0.2	21
RLZ 27 B	24.97	26.26	5	45	5	250	0.5	0.2	21



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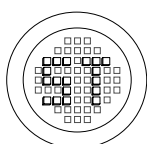
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RLZ Series

Characteristics at $T_a = 25^\circ\text{C}$

Type	Zener Voltage			Operating resistance		Rising operating resistance		Reverse Current	
	V_z (V)			Z_z (Ω)		Z_{ZK} (Ω)		I_R (μA)	
	Min.	Max.	I_z (mA)	Max.	I_z (mA)	Max.	I_z (mA)	Max.	V_R (V)
RLZ 27 C	25.63	26.95	5	45	5	250	0.5	0.2	21
RLZ 27 D	26.29	27.64	5	45	5	250	0.5	0.2	21
RLZ 30	28	32	5	55	5	250	0.5	0.2	23
RLZ 30 A	26.99	28.39	5	55	5	250	0.5	0.2	23
RLZ 30 B	27.70	29.13	5	55	5	250	0.5	0.2	23
RLZ 30 C	28.36	29.82	5	55	5	250	0.5	0.2	23
RLZ 30 D	29.02	30.51	5	55	5	250	0.5	0.2	23
RLZ 33	31	35	5	65	5	250	0.5	0.2	25
RLZ 33 A	29.68	31.22	5	65	5	250	0.5	0.2	25
RLZ 33 B	30.32	31.88	5	65	5	250	0.5	0.2	25
RLZ 33 C	30.9	32.5	5	65	5	250	0.5	0.2	25
RLZ 33 D	31.49	33.11	5	65	5	250	0.5	0.2	25
RLZ 36	34	38	5	75	5	250	0.5	0.2	27
RLZ 36 A	32.14	33.79	5	75	5	250	0.5	0.2	27
RLZ 36 B	32.79	34.49	5	75	5	250	0.5	0.2	27
RLZ 36 C	33.40	35.13	5	75	5	250	0.5	0.2	27
RLZ 36 D	34.01	35.77	5	75	5	250	0.5	0.2	27
RLZ 39	37	41	5	85	5	250	0.5	0.2	30
RLZ 39 A	34.68	36.47	5	85	5	250	0.5	0.2	30
RLZ 39 B	35.36	37.19	5	85	5	250	0.5	0.2	30
RLZ 39 C	36.00	37.85	5	85	5	250	0.5	0.2	30
RLZ 39 D	36.63	38.52	5	85	5	250	0.5	0.2	30

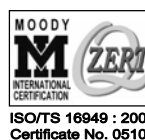
1) Tested with pulses $t_p = 20$ ms.



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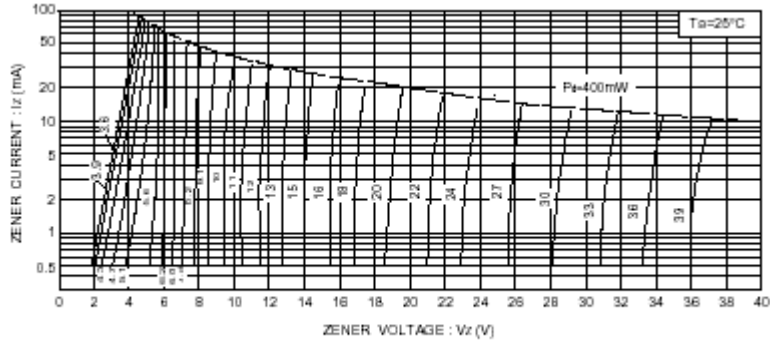


Fig.1 Zener characteristics

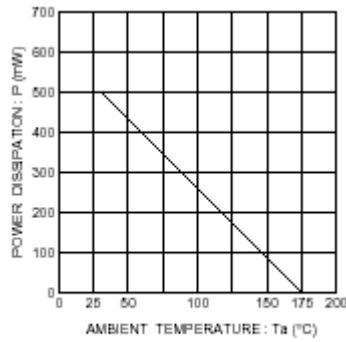


Fig.2 Derating curve

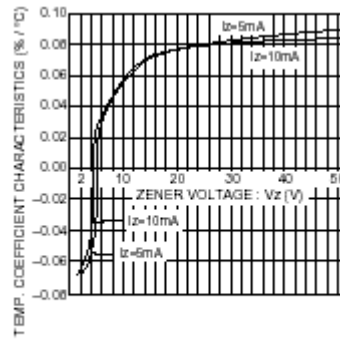
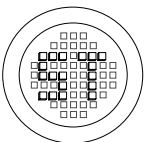


Fig.3 Zener voltage - temp. coefficient characteristics



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